

E1
E2
Connell

signals and the frequency of the program clock;
maintaining a program clock value based on the program clock signals received at the decoder;
determining if there is an absolute difference between the local clock value and the program clock value;
if there is an absolute difference between the local clock value and the program clock value, then adjusting the frequency at which the local clock oscillates so that said absolute difference approaches zero.

E1
E2

3. (Four Times Amended) A method of synchronizing the frequency of a local clock of a digital data decoder with the frequency of a program clock, wherein the local clock oscillates at a local clock frequency, the method comprising the steps of:

determining the difference between the local and program clock frequencies, then adjusting the frequency at which the local clock oscillates so that said difference approaches zero;

maintaining a local clock value based on the oscillations of the local clock;
receiving clock time stamps at the decoder which specify program clock signals and the program clock frequency;

maintaining a program clock value based on the program clock signals received at the decoder;

determining if there is an absolute difference between the local clock value and the program clock value;

E1
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if there is an absolute difference between the local clock value and the program clock value, then adjusting the frequency at which the local clock oscillates so that said absolute difference approaches zero;

wherein the decoder includes hardware for adjusting the local clock frequency and a processor having a software program for adjusting the local clock frequency, and wherein the step of adjusting the frequency of the local clock includes the steps of:

using the hardware to adjust the local clock frequency until a threshold condition occurs; and

after the threshold condition occurs, using the processor to adjust the local clock frequency.

E1
E3

7. (Twice Amended) A system for adjusting a local clock on a digital data decoder, wherein the clock oscillates at a local clock frequency, the system comprising:

means for maintaining a local clock value based on the oscillations of the local clock;

means for receiving clock signals transmitted to the decoder at a program clock frequency;

means for maintaining a program clock value based on the clock signals transmitted to the decoder;

means for determining if there is at least one of (i) a difference between the local clock and the program clock frequencies, and (ii) an absolute difference between the local clock value and the program clock value; and